CW#33: Areas of Triangles and Quadrilaterals

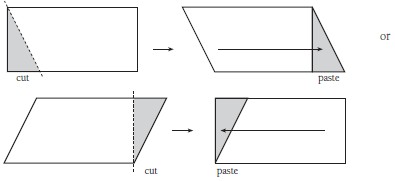
Geometry

Wednesday, Oct. 28th

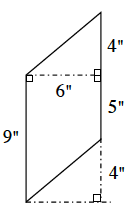
Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_\_\_

**Finding the Area of a Parallelogram**

1. Share a 3x5 index card with your partner.
   1. What is the area of this index card?
   2. Cut a corner off the card as shown in the picture below. What is the area of this parallelogram? How do you know?



1. Damian thinks that the rectangle and parallelogram shown below will cover the same number of square feet. His teammate Clarissa disagrees. Decide whether Damian or Clarissa is correct and explain how you know.



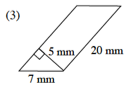
9”

6”

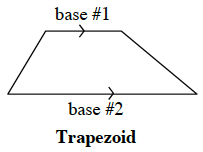
Formula for area of a **parallelogram**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

For each parallelogram below: 1) Draw a rectangle that has the same base and height as the parallelogram, and 2) find the area of each.

Macintosh HD:Users:jholcomb:Desktop:Screen Shot 2014-09-28 at 1.25.38 PM.png 

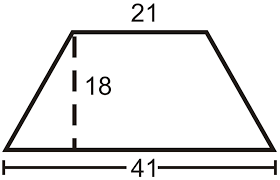
 Macintosh HD:Users:jholcomb:Desktop:Screen Shot 2014-09-28 at 1.26.14 PM.png

**2-82.** **Finding the Area of a Trapezoid**



Definition of a Trapezoid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The two sides that are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are called \_\_\_\_\_\_\_\_\_\_\_\_\_, as shown in the diagram to the right.

1. Based on the definition of a trapezoid, do you think A = *bh* will work for this shape too? Why or why not.
2. Since there are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in a trapezoid, we first need to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the bases. Then you can multiply by the height.

**\*Note**: The base(s) and the height of your parallelogram/trapezoid must be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Formula for area of a **trapezoid**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Directions**: First, identify the shape in each picture and write the correct formula for area next to each shape. Then calculate the exact area AND exact perimeter of each shape.

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| ../../../../../Desktop/Screen%20Shot%202015-10-25%20at%207.52.12%20PM | ../../../../../Desktop/Screen%20Shot%202015-10-25%20at%207.47.12%20PM | ../../../../../Desktop/Screen%20Shot%202015-10-25%20at%207.51.56%20PM |

**Exit Ticket 10/28**

**Name: Period:**

**Directions:**a) Identify each shape

b) Write the correct formula for area next to each shape

c) Calculate the exact area

|  |  |
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**Exit Ticket 10/28**

**Name: Period:**

**Directions:**a) Identify each shape

b) Write the correct formula for area next to each shape

c) Calculate the exact area

|  |  |
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| **../../../../../Desktop/Screen%20Shot%202015-10-25%20at%207.57.07%20PM** | **../../../../../Desktop/Screen%20Shot%202015-10-25%20at%207.52.12%20PM** |